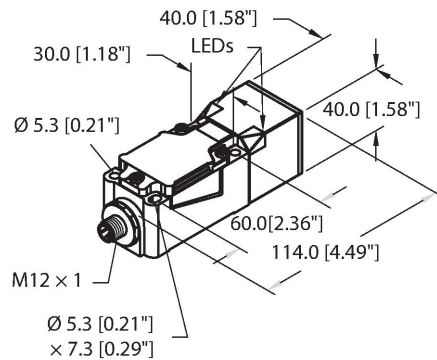


BI15U-CP40-VN4X2-H1141

Inductive Sensor



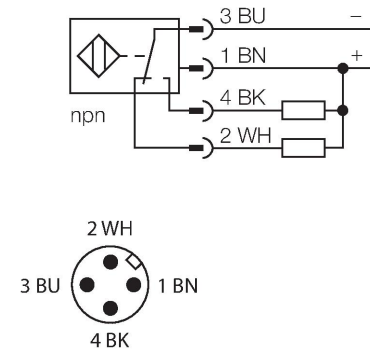
Features

- Rectangular, height 40 mm
- Variable orientation of active face in 9 directions
- Plastic, PBT-GF30-V0
- High luminance corner LEDs
- Optimum view on supply voltage and switching state from any position
- Factor 1 for all metals
- Protection class IP68
- Resistant to magnetic fields
- Extended temperature range
- High switching frequency
- DC 4-wire, 10...65 VDC
- Changeover contact, NPN output
- M12 x 1 male connector

Technical data

Type	BI15U-CP40-VN4X2-H1141
ID	1540590
General data	
Rated switching distance	15 mm
Mounting conditions	Flush
Secured operating distance	$\leq (0.81 \times S_n)$ mm
Repeat accuracy	$\leq 2 \%$ of full scale
Temperature drift	$\leq \pm 10 \%$
	$\leq \pm 15 \%, \leq -25 \text{ }^{\circ}\text{C} \vee \geq +70 \text{ }^{\circ}\text{C}$
Hysteresis	3...15 %
Electrical data	
Operating voltage	10...65 VDC
Residual ripple	$\leq 10 \%$ U_{ss}
DC rated operational current	$\leq 200 \text{ mA}$
No-load current	15 mA
Residual current	$\leq 0.1 \text{ mA}$
Isolation test voltage	$\leq 0.5 \text{ kV}$
Short-circuit protection	yes / Cyclic
Voltage drop at I_o	$\leq 1.8 \text{ V}$
Wire breakage/Reverse polarity protection	yes / Complete
Output function	4-wire, Complementary contact, NPN
DC field stability	300 mT
AC field stability	300 mT _{ss}
Insulation class	□

Wiring diagram



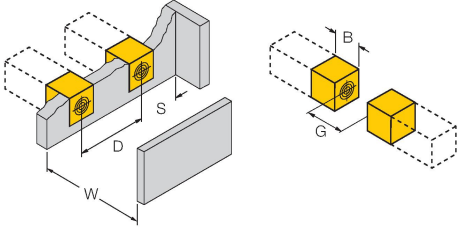
Functional principle

Inductive sensors are designed for wear-free and contactless detection of metal objects. uprox Factor 1 sensors have significant advantages due to their patented ferrite-coreless multi-coil system. They detect all metals at the same large switching distance and are resistant to magnetic fields.

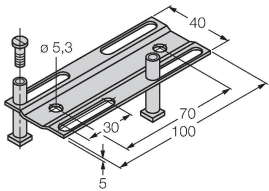
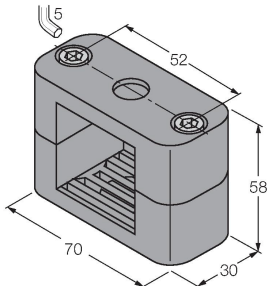
Technical data

Switching frequency	0.25 kHz
Mechanical data	
Design	Rectangular, CP40
Dimensions	114 x 40 x 40 mm
Housing material	Plastic, PBT-GF30-V0, Black
Active area material	Plastic, PA6-GF30-X, yellow
Electrical connection	Connector, M12 × 1
Environmental conditions	
Ambient temperature	-30...+85 °C
Vibration resistance	55 Hz (1 mm)
Shock resistance	30 g (11 ms)
Protection class	IP68
MTTF	874 years acc. to SN 29500 (Ed. 99) 40 °C
Power-on indication	2 × LEDs, Green
Switching state	2 × LEDs, Yellow

Mounting instructions

Mounting instructions/Description	
	Distance D 80 mm
	Distance W 45 mm
	Distance S 40 mm
	Distance G 90 mm
	Width active area B 40 mm

Accessories

JS025/037	69429	BSS-CP40	6901318
			
Adjusting bar for rectangular housings CK/CP40; material: VA 1.4301		Mounting clamp for rectangular housings 40 x 40 mm; material: Polypropylene	